MAR 1 6 2005

### 10/734682 **Application Number** FACSIMILE Filing Date December 12, 2003 **TRANSMITTAL** First Named Inventor Bedingham, William **FORM Art Unit** 1743 **Examiner Name** 703-872-9306 Fax: Attorney Docket Number 59072US002 Total Number of Pages In This Submission: 9 Date: March 16, 2005 Attorney for Applicant: Robert W. Sprague

		ENCLOSURES (check all that apply)		
	Fee Transmittal Form  Issue Fee Transmittal  Amendment Transmittal	Petition		Appeal Communication to Board of Appeals and Interferences
	Amendment/Reply After Final Affidavits/Declaration(s)	Petition to Convert a Provisional Application		Appeal Communication to Technology Center (Appeal Notice, Brief, Reply Brief)
	Extension of Time Request	☐ Power of Attorney, Revocation		Proprietary Information
	Express Abandonment Request	Change of Correspondence Address		Status Letter
×	Information Disclosure Statement	☐ Terminal Disclaimer	×	Other Enclosures:
	Response to Missing Parts/ Incomplete Application	☐ Request for Refund	Inter	rnational Search Report
	Response to Missing Parts under 37 CFR § 1.52 or 1.53	Request for Continued Examination (RCE) Transmittal		
	Drawings .	After Allowance Communication to Technology Center		
		REMARKS:	•	

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32692 Customer Number MAR 1 6 2005

Patent Case No.: 59072US002

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:

BEDINGHAM, WILLIAM

Application No.:

10/734682

Group Art Unit:

1743

Filed:

December 12, 2003

Examiner:

Unknown

Title:

SAMPLE MIXING ON A MICROFLUIDIC DEVICE

### INFORMATION DISCLOSURE STATEMENT

Mail Stop: Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR § 1.8(a)]

I hereby certify that this correspondence is being:

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Itransmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 872-9306.

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

Copics of any cited foreign patents, foreign publications, non-patent literature documents, and any pending U.S. applications filed before June 30, 2003, are enclosed. Copies of any pending U.S. applications filed after June 30, 2003 that can be accessed on the USPTO's IFW system are not enclosed as per USPTO Waiver dated September 21, 2004. Copies of any U.S. patents and published U.S. patent applications are not enclosed.

Under 37 CFR § 1.97(e)(1), I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement.

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Application No.: 10/734682

Case No.: 59072US002

Under 37 CFR § 1.704(d), I hereby state that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR § 1.56(c) more than thirty (30) days prior to the filing of this Information Disclosure Statement.

A copy of the Search Report from a foreign counterpart application is enclosed.

It is believed that no fec is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

Respectfully submitted,

Dota

Robert W. Sprague, Reg. No.:

Office of Intellectual Property Counsel
3M Innovative Properties Company

Facsimile No.: 651-736-3833

Substitute for form 1449A/PTO (modified)

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Page 1 of 1

Application Number	10/734682
Filing Date	December 12, 2003
First Named Inventor	Bedingham, William
Art Unit	1743
Examiner Name	
Attorney Case Number	59072U\$002

			U.S. Patent	Documents	
Exam.	Cite	Document Number	Publication Date or issue Date	Name of Patentee	Pages, Columns, Lines, Whore
Init.*	No.	Doc. Number-(Kind Code if Known)	MM-DD-YYYY	or Applicant of Cited Document	Relevant Passages or Rolevant Figures Appoar
	A1	US- 3,873,217 A	03-25-1975	Anderson et al	
	A2	US- 5,912,134 A	06-15-1999	Shartle et al	
	А3	US-			
	A4	US-			
	A5	US-			
	A6	US-			
	A7	US-			
	A8	US-		The second secon	
	A9	US-			
	A10	U\$-			
	A11	US-			

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Exam.	Cite	Cite Foreign Patent Document		Publication Date Name of Patentee	Name of Patentee or	Pages, Columns, Lines.	Translation
Init.*	No.	Ctry. Code	Number-KindCode (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	(Check If yes)
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	B2						
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	B5		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	V	7000A1 BPG9. BFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF		•
	В6						
	B7						

	OTHER DOCUMENTS					
Exam. Init.*	Che No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(e), volume-lasue number(e), publisher, city and/or country where published	Translation (Check if yes)			
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	C2					
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*Examiner:	Date Considered:	
EXAMINER: Initial if reference considered, whether or not citation conformance and not considered. Include copy of this form with n	is in conformance with MPEP 609. ext communication to applicant.	Draw line through citation if not in

### PATENT COOPERATION TREATY

# **PCT**

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	Ann Form BOT (DA MOO
59072W0003		see Form PCT/ISA/220 as well as, where applicable, Item 5 below.
International application No.	International filing date (day/month/ye	ar) (Earliest) Priority Date (day/month/year)
PCT/US2004/034749	20/10/2004	12/12/2003
Applicant		
3M INNOVATIVE PROPERTIES (	YNAGMO	
This International Search Report has been according to Article 18. A copy is being tre	n prepared by this international Searchin Insmitted to the International Bureau.	ng Authority and is transmitted to the applicant
This International Search Report consists	of a total of sheets	•
X It is also accompanied by	a copy of each prior art document cited	In this report.
Basis of the report     With regard to the tanguage, the it language in which it was filed, unle	nternational search was carried out on ses otherwise indicated under this item.	he basis of the international application in the
The International this Authority (Auk	earch was carried out on the basis of a 3 23.1(b)).	translation of the international application furnished to
b. With regard to any nucleo	tide and/or amino aoid aequence disc	losed in the international application, see Box No. I.
2. Certain claims were foun	d unsearchable (See Box (i).	
3. Unity of invention is lack	ing (888 Box ili).	
4. With regard to the title,		
X the text is approved as sub		
the text has been establish	ed by this Authority to read as follows:	
		•
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5. With regard to the abstract,	•	
the text is approved as sub-		
may, within one month from	ed, according to Rule 38.2(b), by this Au the date of mailing of this international	sthority as it appears in Box No. IV. The applicant search report, submit comments to this Authority.
6. With regard to the drawings,		
a. the figure of the drawings to be pul	olished with the abstract is Figure No	1
X as suggested by the	• •	
as selected by this	Authority, because the applicant falled to	Suggest a figure.
b. none of the figures is to be p	Authority, because this figure better cha published with the abstract.	racterizes the invention.
m PCT/(SA/210 (first sheet) / logueny 2004)		

03/16 '05 08:29

International application No.

### INTERNATIONAL SEARCH REPORT PCT/US2004/034749

FAX:

#### Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

Mixing structures for use on sample processing devices are disclosed. The mixing structures include one or more mixing chambers (60) in fluid communication with a process chamber (40), such that changing the rotational speed of the sample processing device forces sample material into and out of the mixing chamber to achieve mixing of the sample material. The mixing chambers are in fluid communication with the process chambers through mixing ports (62) that are located on the distal sides of the process chambers with respect to the axis about which the sample processing device is rotated.

Form PCT/ISA/210 (continuation of first sheet (3)) (January 2004)

### INTERNATIONAL SEARCH REPORT

FAX:

International Application No PCT/US2004/034740

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A. CLASSI IPC 7	B01F13/00 B01F15/02 B01L3/0	00	
	to International Patent Classification (IPC) or to both national classification	lication and IPC	
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	ternal, WPI Data, PAJ		
C DOCUME	ENTS CONSIDERED TO BE RELEVANT		
Сандину п	Citation of document, with indication, where appropriate, of the re	elevant passages	Relevant to claim No.
X	US 3 873 217 A (ANDERSON ET AL) 25 March 1975 (1975-03-25)		1-10, 21-25, 27-29
A	column 1, line 50 - line 67 column 2, line 23 - line 57 figures 1-3		11-20,26
X	US 2003/138779 A1 (PARTHASARATHY ET AL) 24 July 2003 (2003-07-24) cited in the application		1-4, 6-10, 21-25, 27-29
A	paragraph '0086! — paragraph '00 paragraph '0091! figures 2-4	88!	5,11-20, 26
	<del></del>	-/	<del>**</del> -
4.0	ner documents are listed in the continuation of box C.	Patent family members are tisted in	annex.
*A* documer conside *E* earlier do	regories of cited documents :  In defining the general state of the arr which is not ered to be of particular relevance focument but published on or after the international	*T* later document published after the Interr or priority date and not in conflict with the died to understand the principle or thead thyention	ne application but my underlying the
*L* documen which is citation	are nt which may throw doubts on priority (daim(s) or is clied to establish the publication date of another for other special reason (as specified)	"X" document of particular relevance; the cla cannot be considered novel or cannot be the considered novel or cannot be "Y" document of particular relevance; the cla cannot be considered to involve an inve	e considered to Iment is taken alone Imed invention
*P" documen	ent referring to an oral disclosure, uso, exhibition or neans and published prior to the international filling date but an the priority date claimed	ments, such combined with one or more ments, such combination being obvious in the art.	other such docu- to a person skilled
Date of the ac	ctual completion of the International search	'&' document member of the same patent ta:  Date of mailing of the international search	
	1 February 2005	03/03/2005	
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### INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/034749

10	NAC DOCUMENTS OF THE PARTY OF T	PC1/03200	
Sategory *	RELION) DOCUMENTS CONSIDERED TO BE RELEVANT		
heroffolk .	CRation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
	US 5 912 134 A (SHARTLE ET AL) 15 June 1999 (1999-06-15)  column 7, line 12 - line 33 column 8, line 16 - line 29 column 8, line 61 - line 63 figures 2,4-7		1-3, 5-10, 21-25, 27-29
·	column 8, line 61 - line 63 figures 2,4-7	,	4,11-20, 26

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/US2004/034749

				PCT/U	S2004/034749
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 3873217	Α	25-03-1975	AT	607374 A	15-05-1979
			AU	7154574 A	29-01-1976
			BE	817703 A1	18-11-1974
			ÇA	1006378 A1	08-03-1977
			ĊH	573596 A5	15-03-1976
			DE	2435616 A1	06-02-1975
			DK	395474 A	03-03-1975
			ES	428453 A1	16-04-1977
			FR	2238929 A1	21-02-1975
			GB	1476744 A	16-06-1977
			ΙL	45316 A	31-05-1977
			IΤ	1019737 B	30-11-1977
			JP	50044881 A	22-04-1975
			NL	7409604 A	28-01-1975
			SE	402026 B	12-06-1978
			SE	7409540 A	27-01-1975
			SU	574170 A3	25-09-1977
UC 0000100776					
US 2003138779	A1	24-07-2003	AU	2002366944 A1	09-07-2003
			CA	2469980 Al	03-07-2003
			ΕP	1461155 A2	29-09-2004
			MO	03054509 A2	03-07-2003
US 5912134	Α	15-06-1999	US	5627041 A	06-05-1997
			AT	208902 T	15-11-2001
			ΑÜ	700750 B2	14-01-1999
			ΑÜ	3462795 A	27-03-1996
•			CA	2198854 A1	14-03-1996
			DE	69523931 D1	20-12-2001
			DE	69523931 T2	29-08-2002
			EP	0778950 A1	18-06-1997
					10 00.133/
			JP	10505672 T	02-06-1998

Form PCT/ISA/210 (patent family annex) (January 2004)